

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Andreas Lendlein and Ute Ridder

Serial No.:

10/552,654

Art Unit:

Not Yet Assigned

Filed:

October 7, 2005

Examiner:

Not Yet Assigned

For:

BLENDS WITH SHAPE MEMORY CHARACTERISTICS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including (3) pages of Form PTO-1449, copies of fifteen (15) documents cited therein, and a copy of the International Search Report mailed July 29, 2004 in PCT/EP2004/003066, which corresponds to the above-identified application.

Pursuant to the waiver in the notice entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications Filed After June 30, 2003" published on August 5, 2003 in 1273 OG 55, a copy of the cited U.S Patent is not enclosed.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission.

U.S.S.N.: 10/552,654 Filed: October 7, 2005

INFORMATION DISCLOSURE STATEMENT

However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-3129.

## U.S. Patents

Number	Issue Date	<u>Patentee</u>	Class/Subclass
5,446,109	08-29-1995	Matsumura, et al.	525/420
5,506,300	04-09-1996	Ward, et al.	525/88
5,665,831	09-09-1997	Neuenschwander, et al.	525/415
6,388,043	05-14-2002	Langer, et al.	528/80

## **Foreign Documents**

Number	Publication Date	<u>Patentee</u> <u>Cou</u>	ntry
0 344 912	12-06-1989	Minnesota Mining and	EP
•		Manufacturing Company	
1 000 958	05-17-2000	Takiron Co. Ltd.	EP
63 179 956	07-23-1988	Asahi Chemical Industry	JP
2 123 129	05-10-1990	Toray Industries	JP
2 239 930	09-21-1990	Toray Industries	JP
2 240 135	09-25-1990	Toray Industries	JP
4 185 772	07-02-1992	Toray Industries	JP
4 342 762	11-30-1992	Mitsubishi Heavy Ind, Ltd	JP.
11 209 595	08-03-1999	Agency IND Science Tech	n JP
		Nakayama Kazuo	
2002 014 054	02-25-2002	Ulsan Industry Education	KR
		Foundation	
WO 99/42147	08-26-1999	Massachusetts Institute	PCT
		Of Technology	
WO 01/07499	02-01-2001	Elastomedic PTY, Limited	PCT

#### **Publications**

KUSY and WHITLEY, "Thermal characterization of shape memory polymer blends for biomedical implantations", *Thermochimica Acta*, 243(2):253-263 (1994).

NEUENSCHWANDER, et al., "Cell and tissue-compatible implant materials/synthesis", Transactions of the Annual Meeting of the Society for Biomaterials, 2:403, (1996).

OHKI, et al., "Mechanical and shape memory behavior of composites with shape memory polymer", *Composites: Part A*, 35(9):1065-1073 (2004).

### Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

Patrea L. Pabst

Reg. No. 31,284

Dated: December 5, 2005

PABST PATENT GROUP LLP 400 Colony Square, Suite 1200 1201 Peachtree Street Atlanta, Georgia 30361 (404) 879-2151 (Telephone) (404) 879-2160 (Fax) Sheet

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Examiner Name
Attorney Docket Number

Examiner Initials*	Cite No.1	US Patent	Document	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code 2 (if known)			
		5,506,300		Ward, et al.	04-09-1996	
		5,446,109		Matsumura, et al.	08-29-1995	
		5,665,831		Neuenschwander, et al.	09-09-1997	
		6,388,043		Langer, et al.	05-14-2002	
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Examiner Initials*	Cite No.1						Foreign Patent Doo	ument	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office.3	Number⁴	Kind Code⁵ (if known)								
		EP	0 344 912		Minnesota Mining and Manufacturing Company	12-06-1989	-					
		EP	1 000 958		Takiron Co. Ltd.	05-17-2000						
		JP	63 179 956		Asahi Chemical Industry	07-23-1988						
		JP	2 123 129		Toray Industries	05-10-1990						
		JP	2 239 930		Toray Industries	09-21-1990						
		JP	2 240 135		Toray Industries	09-25-1990						
		JP	4 185 772		Toray Industries	07-02-1992						
		JP	4 342 762		Mitsubishi Heavy Ind, Ltd	11-30-1992						
		JP	11 209 595		Agency IND Science Techn and Nakayama Kazuo	08-03-1999						

Examiner's	Date Considered	
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO Complete if Known 10/552,654 INFORMATION DISCLOSURE Application Number STATEMENT BY APPLICANT (use as many sheets as necessary) October 7, 2005 Filing Date First Named Inventor LENDLEIN Andreas **Group Art Unit Examiner Name** 3 Attorney Docket Number **MNE 109** Sheet 2 of

U.S. PATENT DOCUMENTS								
Examiner Initials* Cite	Cite No.1	US Patent Document		S Patent Document Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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Examiner Initials*	Cite No. <sup>1</sup>		Foreign Patent Doo	ument	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>8</sup>
		Office.3	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	:	KR	2002 014 054		Ulsan Industry Education Foundation	02-25-2002		
	•	PCT	WO 99/42147		Massachusetts Institute Of Technology	08-26-1999	-	
		PCT	WO 01/07499		Elastomedic PTY, Limited	02-01-2001		
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	Subs	titute for	form 1449A	PIO	Complete if Known		
01	PE 4082	STA	TEMEN	ION DISCLOSURE IT BY APPLICANT by sheets as necessary)	Application Number	10/552,654	
DEC	(ببر 8 2005 8 (	,		,,,,,	Filing Date	October 7, 2005	
<b>3</b>	<i>\&amp;</i>				First Named Inventor	LENDLEIN Andreas	
Chr.	ADEMAS SERVE				Group Art Unit		
TA	ADBIA				Examiner Name		
	Sheet	3	of	33	Attorney Docket Number	MNE 109	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		KUSY and WHITLEY, "Thermal characterization of shape memory polymer blends for biomedical implantations", Thermochimica Acta, 243(2):253-263 (1994).	
		NEUENSCHWANDER, et al., "Cell and tissue-compatible implant materials/synthesis", Transactions of the Annual Meeting of the Society for Biomaterials, 2:403, (1996).	
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